

REMARKS

Claims 23-46 are pending in this case. Based upon the following remarks, it is respectfully submitted that these claims are allowable.

A. §102 Rejection

Claims 23, 24, 26, 28-30, 34-36, 38, 40-42 and 46 were rejected under 35 U.S.C. §102(b) as being anticipated by Jones et al., U.S. Patent No. 4,750,112 ("*Jones*"). This rejection is respectfully traversed and it is submitted that these claims recite subject matter which is patentable over *Jones*.

Regarding independent claims 23 and 35, the Examiner contends that *Jones* teaches all of the recited elements. More specifically, quoting language from claim 23, the Examiner states that *Jones* teaches the following (with emphasis added):

...  
executing said one or more data processing instructions with a second portion (Execution Pipeline, EP) of said pipeline subcircuit subsequent to said first pipeline subcircuit portion in response to said enabled first clock signal [Figs. 2, 5]; and  
receiving an operation suspension instruction (I21 causes the suspension of the IP, therefore I21 is interpreted as operation suspension instruction) with said first pipeline subcircuit portion [col. 9, lines 25-28] and in response thereto  
asserting one or more control signals from said pipeline subcircuit [col. 9, lines 27-30], and  
disabling said first clock signal [Fig. 5 shows that the clock signal of the suspended IP during T24 is disabled (no clock pulse)].

According to the assertions of the Examiner, as quoted above, *Jones* teaches "disabling

said first clock signal” because, as shown in Figure 5 of *Jones*, the clock signal of the IP is disabled inasmuch as there is no clock pulse during T24. (For purposes of these remarks only, comparisons made by the Examiner between the presently recited elements of claim 23 and the cited elements of *Jones* are discussed as if they are accurate and proper. However, such discussion is not intended to indicate or imply any agreement or concession regarding either the accuracy or propriety of such comparisons.)

First, it is not clear which of the six clock signals associated with the three stages (IF, ID, AG) of the IP is considered by the Examiner to be the “first clock signal”. In any event, as seen in Figure 5 of *Jones*, at least one of such six clock signals (CID2) appears to remain enabled since there is a clock pulse during T24. Hence, operation of the IP is not truly suspended inasmuch as at least part of the IP appears to remain active. Therefore, it is respectfully submitted that *Jones* fails to teach or suggest the presently claimed invention.

Second, a careful comparison of the claims with the disclosure of *Jones* reveals even more clearly why *Jones* fails to teach or suggest the presently claimed invention. More specifically, as is expressly recited (with emphasis added), the execution of the “one or more data processing instructions” is done with the “second pipeline subcircuit portion” in response to the enabled “first clock signal”, and, responsive to reception of the “operation suspension instruction” with the “first pipeline subcircuit portion”, the “first clock signal” is disabled. Hence, if the IP and EP of *Jones* correspond to the presently recited first and second “pipeline subcircuit portions”, respectively, as asserted by the Examiner, responsive to reception of I21 by the IP (“first pipeline subcircuit portion”), the clock signals of the EP (“second pipeline subcircuit portion”) must be disabled. However, as is clearly depicted in Figure 5 of *Jones*, all six clock signals of the EP remain enabled at least inasmuch as each has a clock pulse during T24. Instruction I21 is a machine instruction that, in some instances, may temporarily delay the instruction fetch pipeline clock due to an execution data dependency, i.e., where the data needed is not yet available from the execution pipeline. This is in stark contrast to the presently claimed

invention in which the subject clock is stopped with no such execution data dependency.

Regarding dependent claims 24, 26, 28-30, 34, 36, 38, 40-42 and 46, in accordance with and with reference to the remarks in this Part immediately hereinabove, it is submitted that independent claims 23 and 35 recite subject matter which is patentable over *Jones*. Therefore, it is still further submitted that their respective dependent claims 26, 28-34, 38 and 40-46 recite subject matter which is patentable over *Jones* as well, particularly in view of these latter claims' further recited limitations.

B. §103 Rejection

Claims 31-33 and 43-45 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Jones*. This rejection is respectfully traversed and it is submitted that these claims recite subject matter which is patentable over *Jones*.

In accordance with and with reference to the remarks Part A hereinabove, it is submitted that independent claims 23 and 35 recite subject matter which is patentable over *Jones*. Therefore, it is still further submitted that their respective dependent claims 31-33 and 43-45 recite subject matter which is patentable over *Jones* as well, particularly in view of these latter claims' further recited limitations.

C. Allowable Subject Matter

Claims 25, 27, 37 and 39 were cited as being objectionable for being dependent upon rejected base claims but were identified as being allowable if rewritten in independent form to include all limitations of their respective base claims and any intervening claims. This objection is respectfully traversed. In accordance with and with reference to the remarks in Parts A and B hereinabove, it is submitted that independent claims 23 and 35 and their respective dependent claims 26 and 38 recite subject matter which is patentable over *Jones*. Therefore, it is still further submitted that dependent claims 25, 27, 37 and 39 are not objectionable.

D. Conclusion

Claims 23-46 remain pending in this case. Based upon the foregoing remarks, it is respectfully that these claims are allowable and this application is in condition for allowance. Reconsideration and early allowance are submitted requested.

Respectfully submitted,

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